

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A dual LCD device, comprising:

a liquid crystal panel having a liquid crystal layer interposed between a first substrate and a second substrate;

first and second polarizing plates attached to opposing surfaces of the liquid crystal panel;

a first front light unit having a first side attached to a front side of the liquid crystal panel; and

a second front light unit having a first side attached to a rear side of the liquid crystal panel,

wherein the first and second front light units are disposed at opposite sides of the liquid crystal panel, the first and second front light units overlap each other with the liquid crystal panel disposed therebetween, and the first and second front light units each have second sides opposite to the first sides having prismatic configurations,

wherein the liquid crystal panel functions in a TN mode, such that the first front light unit is in an ON state and an image displayed on the rear side of the liquid crystal panel is in a black mode, and such that the first front light unit is in an OFF state and an image displayed on the rear side of the liquid crystal panel is in a white mode, and

wherein the liquid crystal panel functions in a TN mode, such that the second front light unit is in an ON state and an image displayed on the front side of the liquid crystal panel is in a black mode, and the second front light unit is in an OFF state and an image displayed on the front side of the liquid crystal panel is in a white mode.

Claim 2 (Canceled).

Claim 3 (Original): The device according to claim 1, wherein the first and second polarizing plates are attached to both surfaces of the liquid crystal panel such that optical axes of the first and second polarizing plates are perpendicular to each other.

Claim 4 (Original): The device according to claim 1, wherein the first front light unit is operated to cause a first image to be displayed on the rear side of the liquid crystal panel, and the second front light unit is operated to cause a second image to be displayed on the front side of the liquid crystal panel.

Claims 5 and 6 (Canceled).

Claim 7 (Currently Amended): A dual LCD device, comprising:

a liquid crystal panel having a liquid crystal layer interposed between a first substrate and a second substrate;

first and second polarizing plates attached to opposing surfaces of the liquid crystal panel;

a first front light unit having a first side attached to a front side of the liquid crystal panel;

a second front light unit having a first side attached to a rear side of the liquid crystal panel; and

a fine reflecting and scattering film prepared between one of the first polarizing plate and the first front light unit, and the second polarizing plate and the second front light unit,

wherein the first and second front light units are disposed at opposite sides of the liquid crystal panel, the first and second front light units overlap each other with the liquid crystal panel disposed therebetween, and the first and second front light units each have second sides opposite to the first sides having prismatic configurations,

wherein the liquid crystal panel functions in a TN mode, such that the first front light unit is in an ON state and an image displayed on the rear side of the liquid crystal panel is in a black mode, and such that the first front light unit is in an OFF state and an image displayed on the rear side of the liquid crystal panel is in a white mode, and

wherein the liquid crystal panel functions in a TN mode, such that the second front light unit is in an ON state and an image displayed on the front side of the liquid crystal panel is in a black mode, and the second front light unit is in an OFF state and an image displayed on the front side of the liquid crystal panel is in a white mode.

Claim 8 (Canceled).

Claim 9 (Original): The device according to claim 7, wherein the first and second polarizing plates are attached to both surfaces of the liquid crystal panel such that optical axes of the first and second polarizing plates are perpendicular to each other.

Claim 10 (Original): The device according to claim 7, wherein the first front light unit is operated to cause a first image to be displayed on the rear side of the liquid crystal panel, and the second front light unit is operated to cause a second image to be displayed on the front side of the liquid crystal panel.

Claim 11 (Original): The device according to claim 7, wherein the fine reflecting and scattering film is prepared between the first polarizing plate and the first front light unit and receives ambient light supplied from the rear side of the liquid crystal panel and reflects the received ambient light to the rear side of the liquid crystal panel.

Claim 12 (Original): The device according to claim 11, wherein the fine reflecting and scattering film is prepared between the first polarizing plate and the first front light unit and enhances a brightness of the image displayed on the rear side of the liquid crystal panel.

Claim 13 (Original): The device according to claim 7, wherein the fine reflecting and scattering film is prepared between the second polarizing plate and the second front light unit and receives ambient light supplied from the front side of the liquid crystal panel and reflects the received ambient light to the front side of the liquid crystal panel.

Claim 14 (Original): The device according to claim 13, wherein the fine reflecting and scattering film is prepared between the second polarizing plate and the second front light unit and enhances a brightness of the image displayed on the front side of the liquid crystal panel.

Claim 15 (Original): The device according to claim 7, wherein the fine reflecting and scattering film is prepared between the first polarizing plate and the first front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the rear side of the liquid crystal panel due to a light emitted from the first front light unit.

Claim 16 (Original): The device according to claim 7, wherein the fine reflecting and scattering film is prepared between the second polarizing plate and the second front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the front side of the liquid crystal panel due to a light emitted from the second front light unit.

Claim 17 (Currently Amended): A dual LCD device, comprising:

- a liquid crystal panel having a liquid crystal layer interposed between a first substrate and a second substrate;

- first and second polarizing plates attached to opposing surfaces of the liquid crystal panel;

- a first front light unit having a first side attached to a front side of the liquid crystal panel;

- a second front light unit having a first side attached to a rear side of the liquid crystal panel; and

- a scattering film prepared between one of the first polarizing plate and the first front light unit, and the second polarizing plate and the second front light unit,

- wherein the first and second front light units are disposed at opposite sides of the liquid crystal panel, the first and second front light units overlap each other with the liquid crystal panel disposed therebetween, and the first and second front light units each have second sides opposite to the first sides having prismatic configurations,

wherein the liquid crystal panel functions in a TN mode, such that the first front light unit is in an ON state and an image displayed on the rear side of the liquid crystal panel is in a black mode, and such that the first front light unit is in an OFF state and an image displayed on the rear side of the liquid crystal panel is in a white mode, and

wherein the liquid crystal panel functions in a TN mode, such that the second front light unit is in an ON state and an image displayed on the front side of the liquid crystal panel is in a black mode, and the second front light unit is in an OFF state and an image displayed on the front side of the liquid crystal panel is in a white mode.

Claim 18 (Canceled).

Claim 19 (Original): The device according to claim 17, wherein the first and second polarizing plates are attached to both surfaces of the liquid crystal panel so that optical axes of the polarizing plates are perpendicular to each other.

Claim 20 (Original): The device according to claim 17, wherein the first front light unit is operated to cause a first image to be displayed on the rear side of the liquid crystal panel, and the second front light unit is operated to cause a second image to be displayed on the front side of the liquid crystal panel.

Claim 21 (Original): The device according to claim 17 wherein the scattering film is prepared between the first polarizing plate and the first front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the rear side of the liquid crystal panel due to a light emitted from the first front light unit.

Claim 22 (Original): The device according to claim 17, wherein the scattering film is prepared between the second polarizing plate and the second front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the front side of the liquid crystal panel due to a light emitted from the second front light unit.

Claim 23 (Currently Amended): A method of fabricating a dual LCD device, comprising:

providing a liquid crystal panel having a liquid crystal layer interposed between a first substrate and a second substrate;

providing first and second polarizing plates on opposing surfaces of the liquid crystal panel;

providing a first front light unit having a first side on a front side of the liquid crystal panel; and

providing a second front light unit having a first side on a rear side of the liquid crystal panel,

wherein the first and second front light units are disposed at opposite sides of the liquid crystal panel, the first and second front light units overlap each other with the liquid crystal panel disposed therebetween, and the first and second front light units each have second sides opposite to the first sides having prismatic configurations,

wherein the liquid crystal panel functions in a TN mode, such that the first front light unit is in an ON state and an image displayed on the rear side of the liquid crystal panel is in a black mode, and such that the first front light unit is in an OFF state and an image displayed on the rear side of the liquid crystal panel is in a white mode, and

wherein the liquid crystal panel functions in a TN mode, such that the second front light unit is in an ON state and an image displayed on the front side of the liquid crystal panel is in a black mode, and the second front light unit is in an OFF state and an image displayed on the front side of the liquid crystal panel is in a white mode.

Claim 24 (Canceled).

Claim 25 (Original): The method according to claim 23, wherein the first and second polarizing plates are provided on both surfaces of the liquid crystal panel such that optical axes of the first and second polarizing plates are perpendicular to each other.

Claim 26 (Original): The method according to claim 23, wherein the first front light unit is operated to cause a first image to be displayed on the rear side of the liquid crystal panel, and the second front light unit is operated to cause a second image to be displayed on the front side of the liquid crystal panel.

Claim 27 (Canceled).

Claim 28 (Canceled).

Claim 29 (Currently Amended): A method of fabricating a dual LCD device, comprising:

- providing a liquid crystal panel having a liquid crystal layer interposed between a first substrate and a second substrate;

- providing first and second polarizing plates to opposing surfaces of the liquid crystal panel;

- providing a first front light unit having a first side on a front side of the liquid crystal panel;

- providing a second front light unit having a first side on a rear side of the liquid crystal panel; and

- providing a fine reflecting and scattering film between one of the first polarizing plate and the first front light unit, and the second polarizing plate and the second front light unit,

wherein the first and second front light units are disposed at opposite sides of the liquid crystal panel, the first and second front light units overlap each other with the liquid crystal panel disposed therebetween, and the first and second front light units each have second sides opposite to the first sides having prismatic configurations,

wherein the liquid crystal panel functions in a TN mode, such that the first front light unit is in an ON state and an image displayed on the rear side of the liquid crystal panel is in a black mode, and such that the first front light unit is in an OFF state and an image displayed on the rear side of the liquid crystal panel is in a white mode, and

wherein the liquid crystal panel functions in a TN mode, such that the second front light unit is in an ON state and an image displayed on the front side of the liquid crystal panel is in a black mode, and the second front light unit is in an OFF state and an image displayed on the front side of the liquid crystal panel is in a white mode.

Claim 30 (Canceled).

Claim 31 (Original): The method according to claim 29, wherein the first and second polarizing plates are provided on both surfaces of the liquid crystal panel such that optical axes of the first and second polarizing plates are perpendicular to each other.

Claim 32 (Original): The method according to claim 29, wherein the first front light unit is operated to cause a first image to be displayed on the rear side of the liquid crystal panel, and the second front light unit is operated to cause a second image to be displayed on the front side of the liquid crystal panel.

Claim 33 (Original): The method according to claim 29, wherein the fine reflecting and scattering film is provided between the first polarizing plate and the first front light unit and receives ambient light supplied from the rear side of the liquid crystal panel and reflects the received ambient light to the rear side of the liquid crystal panel.

Claim 34 (Original): The method according to claim 33, wherein the fine reflecting and scattering film is provided between the first polarizing plate and the first front light unit and enhances a brightness of the image displayed on the rear side of the liquid crystal panel.

Claim 35 (Original): The method according to claim 29, wherein the fine reflecting and scattering film is provided between the second polarizing plate and the second front light unit and receives ambient light supplied from the front side of the liquid crystal panel and reflects the received ambient light to the front side of the liquid crystal panel.

Claim 36 (Original): The method according to claim 35, wherein the fine reflecting and scattering film is provided between the second polarizing plate and the second front light unit and enhances a brightness of the image displayed on the front side of the liquid crystal panel.

Claim 37 (Original): The method according to claim 29, wherein the fine reflecting and scattering film is provided between the first polarizing plate and the first front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the rear side of the liquid crystal panel due to a light emitted from the first front light unit.

Claim 38 (Original): The method according to claim 29, wherein the fine reflecting and scattering film is provided between the second polarizing plate and the second front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the front side of the liquid crystal panel due to a light emitted from the second front light unit.

Claim 39 (Currently Amended): A method of fabricating a dual LCD device, comprising:

- providing a liquid crystal panel having a liquid crystal layer interposed between a first substrate and a second substrate;

- providing first and second polarizing plates on opposing surfaces of the liquid crystal panel;

providing a first front light unit having a first side on a front side of the liquid crystal panel;

providing a second front light unit having a first side on a rear side of the liquid crystal panel; and

providing a scattering film between one of the first polarizing plate and the first front light unit, and the second polarizing plate and the second front light unit, wherein the first and second front light units are disposed at opposite sides of the liquid crystal panel, the first and second front light units overlap each other with the liquid crystal panel disposed therebetween, and the first and second front light units each have second sides opposite to the first sides having prismatic configurations,

wherein the liquid crystal panel functions in a TN mode, such that the first front light unit is in an ON state and an image displayed on the rear side of the liquid crystal panel is in a black mode, and such that the first front light unit is in an OFF state and an image displayed on the rear side of the liquid crystal panel is in a white mode, and

wherein the liquid crystal panel functions in a TN mode, such that the second front light unit is in an ON state and an image displayed on the front side of the liquid crystal panel is in a black mode, and the second front light unit is in an OFF state and an image displayed on the front side of the liquid crystal panel is in a white mode.

Claim 40 (Canceled).

Claim 41 (Original): The method according to claim 39, wherein the first and second polarizing plates are provided on both surfaces of the liquid crystal panel so that optical axes of the polarizing plates are perpendicular to each other.

Claim 42 (Original): The method according to claim 39, wherein the first front light unit is operated to cause a first image to be displayed on the rear side of the liquid crystal panel, and the second front light unit is operated to cause a second image to be displayed on the front side of the liquid crystal panel.

Claim 43 (Original): The method according to claim 39, wherein the scattering film is provided between the first polarizing plate and the first front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the rear side of the liquid crystal panel due to a light emitted from the first front light unit.

Claim 44 (Original): The method according to claim 39, wherein the scattering film is provided between the second polarizing plate and the second front light unit and prevents Moiré phenomenon from occurring when an image is displayed on the front side of the liquid crystal panel due to a light emitted from the second front light unit.